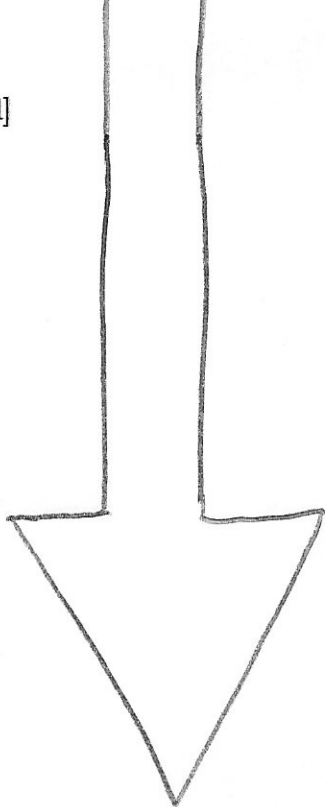


Practice Quiz

1. Draw a big arrow from the top of your first page to the middle of your second page (all the way to question 2). ↓

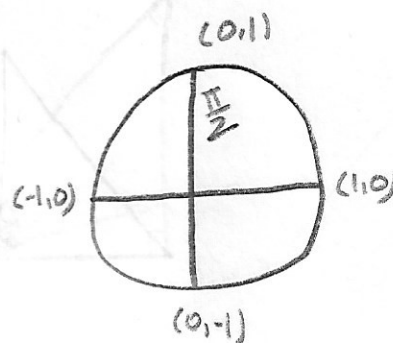


1. [continued]



2. Calculate $\sin\left(\frac{\pi}{2}\right)$ (is your calculator in Radian mode??)

$$\sin\left(\frac{\pi}{2}\right) = 1$$



3. Evaluate $\lim_{x \rightarrow \infty} e^x$ $\rightarrow e \approx 2.718$

using properties of exponential functions of $f(x) = b^x$
if $b > 1$

$$f(x) \rightarrow \infty \text{ as } x \rightarrow \infty$$

$$f(x) \rightarrow 0 \text{ as } x \rightarrow -\infty$$

Therefore,

$$\lim_{x \rightarrow \infty} e^x = \infty$$

4. Evaluate $\lim_{x \rightarrow -\infty} e^x$

if $b > 1$

$f(x) \rightarrow \infty$ as $x \rightarrow \infty$

$f(x) \rightarrow 0$ as $x \rightarrow -\infty$

Therefore,

$$\lim_{x \rightarrow -\infty} e^x = 0$$

5. Draw a smiley face somewhere random so you can tell Gradescope what page to look on for this question. ☺

